ABSTRACT

The present invention provides a method and apparatus which extracts flat data from a hierarchically related representation of a circuit, such as a netlist. The apparatus and method identifies unique cell elements by a cell instance identifier and determines flat data associated with those elements. When a previously encountered cell instance which has flat data stored describing that element is selected, higher level flat data which has been stored as the apparatus traverses the representation is appended to the stored flat data for the selected element. In this manner, an optimum flat data path to all elements, nets and components is created without a need for re-scanning previously encountered cell instances.